Docket No. AT9-99-085   *PATENT*

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application: Rodriguez et al.	§	
	§	
	§	
Serial No.: 09/329,461	§	Group Art Unit: 3625
	§	
Filed: June 10, 1999	§	Examiner: Cuong H. Nguyen
	§	
For: Method and Apparatus for	§	
Encoding Transactions for Goods	§	
and Services Using an E-Receipt	§	

Assistant Commissioner for Patents
Washington, D.C. 20231

ATTENTION: Board of Patent Appeals
and Interferences

APPELLANT'S BRIEF (37 C.F.R. 1.192)

This brief is in furtherance of the Notice of Appeal, filed in this case on March 4, 2002. This brief is also in response to the final office action mailed 08/19/02 and replaces the brief filed on 05/06/02.

No fees are believed due, as the fees have already been paid with the previous appeal brief.

This brief is transmitted in triplicate. (37 C.F.R. 1.192(a))

REAL PARTIES IN INTEREST

The real party in interest in this appeal is the following party: International Business Machines, Inc. of Armonk, New York.

RELATED APPEALS AND INTERFERENCES

With respect to other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending appeal, there are no such appeals or interferences.

STATUS OF CLAIMS

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims in the application are: 1-46

B. STATUS OF ALL THE CLAIMS IN APPLICATION

1. Claims canceled previously: 15-24.
2. Claims canceled in accompanying amendment: 1-2, 5-14, 25-26, 29-46.
3. Claims withdrawn from consideration but not canceled: None.
4. Claims still pending: 3-4 and 27-28.
5. Claims allowed: None.
6. Claims rejected: 3-4 and 27-28.

C. CLAIMS ON APPEAL

The claims on appeal are: 3-4 and 27-28.

STATUS OF AMENDMENTS

The accompanying Amendment contains the only changes to the claims after the Final Rejection and is limited to reducing the issues under consideration. The claims shown in the attached appendix represent the status of the claims on appeal after entry of this amendment.

SUMMARY OF INVENTION

The application discloses a novel method for using an electronic receipt (e-receipt) in place of a paper receipt, as well as a computer program for implementing this method. Using this novel method, a consumer and a merchant conduct a commercial transaction using a distributed data processing system. Rather than issuing a paper receipt, an electronic receipt is recorded on a removable storage medium, such as a smart card or optical card, which can then be given to the consumer. The receipt on the removable storage medium can be used for similar purposes as a paper receipt is used currently.[1]

One advantage to an electronic receipt derives from the fact that the receipt is not human readable, but must be inserted into a computer. When the purchase of an item or service and its delivery are separated either in time or in location, a store can either choose to update its inventory on the computer at the time of purchase or at the time of delivery. Updating at the time of purchase is more reliable, although it is not as accurate, especially if delivery is delayed for any reason. Updating at the time of delivery is more accurate, but with paper receipts, computer entry may not always get done when delivery is made.[2] With electronic receipts, the act of verifying a receipt can trigger inventory updating, a process that is both accurate and reliable.[3]

The removable storage medium can be an optical card, a smart card, or any similar device. These storage media are able to store thousands of e-receipts and other electronic documents related to a commercial transaction in a form that is easy for the consumer to carry, with the integrity of each guaranteed through digital signature, digital certificate, etc.[4]

---

[1] Application, p.1, 1.22 through p.4, 1.25
[2] Application, p.3, 1.5-14
[3] Application, p.22, 1.4-20
[4] Application, p.4, 1.18-25

ISSUES

The issues on appeal are:

Claims 3-4 and 27-28 are rejected under 35 U.S.C. 103(a) as unpatentable over Tognazzini in view of the Official Notice.

Additionally, the Examiner has noted *"Limitations in claims ...27 ... (non-statutory) are not considered because a floppy disk merely contain nonfunctional descriptive material on a computer readable medium."*

GROUPING OF CLAIMS

The extant claims can stand or fall together. All these claims are directed to updating an inventory when the product is delivered, rather than when it is purchased;

ARGUMENTS RE NON-STATUTORY SUBJECT MATTER

The Examiner has rejected Claim 37, directed to *"A computer program product in a computer-readable medium"*, as non-statutory matter. In an earlier rejection in the same vein, the Examiner stated that the claim *"is essentially directed to a non-functional descriptive material (a computer program per se) on a computer storage medium (broadly claiming as an article of manufacturer)."*

It is submitted that this reading does not follow the Patent Office's EXAMINATION GUIDELINES FOR COMPUTER-RELATED INVENTIONS, published in February, 1996. This guideline differentiates between descriptive material that is "functional descriptive material" and that which is "non-functional descriptive material", noting that "functional descriptive material" consists of data structures and <u>computer programs that impart functionality when encoded on a computer-readable medium</u>. It further notes that "<u>when functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases.</u>" Thus, it is submitted that the claimed computer program product in a computer readable medium fulfills the definition of functional descriptive material recorded on computer readable medium.

It is noted that a search of patents issued to the assignee, International Business Machines during the period 1996-2002 found a total of 1,391 patents that recited "*A computer program product*" and forty-one of those patents recited "*A computer program product in a computer-readable medium*". During the same time, 3,837 total patents issued containing claims directed to a "*computer program product*". It is submitted that the Examiner has not offered any reason why this program should be considered an exception to the notion above that functional descriptive material, when recorded on computer-readable medium, generally becomes statutory. Thus, this rejection is believed overcome.

ARGUMENTS RE PRIOR ART

It is submitted that the outstanding rejections should be overturned for three separate reasons:

1) the Examiner has not met his burden for a prima facie case of obviousness,

2) there are specific combinations of limitations in each independent claim that are neither met nor suggested by any combination of references cited; and

3) the Examiner has not shown a motive to combine these references that would be used by one of ordinary skill in the art.

Prima Facie Obviousness

It is submitted that the Examiner has presented an extremely broad, nonspecific rejection of the claims and has not met his burden for a prima facie case of obviousness as that burden is designated in the law and in the Manuel of Patent Examining Procedures (MPEP).

The rejection given by the Examiner is for obviousness over Tognazzini in view of the Official Notice, with official notice being taken that:

"the following limitations are notorious well-known in the art (at least from cited references [i.e., Vaghi, Beatson et al., and Muftic]*):*
- *processing means for processing a transaction;*
- *generating means for generating e-receipts;*
- *storing means for storing e-receipts;*
- *reading means for reading e-receipts;*
- *validating means for validating e-receipts;*
- *indicating means for providing an indication to proceed with a delivery of related goods/services;*
- *inspecting means for inspecting a digital signature of e-receipts."*

Presumably, it is the fact that the Examiner considered the claim limitations to be *"so obvious/notoriously well-know in a computer system"* that the Examiner noted that *"cited prior art's limitations are not necessary spelled-out exactly claimed languages"*[5]. It is noted that the references mentioned include more than 100 pages of text and drawings describing inventions quite different from Applicant's. It is submitted that if the limitations are not spelled out as the claims recite, which the Examiner admits, then the Examiner has a duty to explain how he has reached his conclusion and what specific parts of the references relied on he used to reach that conclusion.

The MPEP sets out the Examiner's duty in such a rejection. Quoting from the MPEP, section 706.02(j) states that

"35 U.S.C. 103 authorizes a rejection where, to meet the claim, it is necessary to modify a single reference or to combine it with one or more other references. After indicating that the rejection is under 35 U.S.C. 103, the examiner should set forth in the Office action:

(A) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate,

(B) the difference or differences in the claim over the applied reference(s),

(C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and

(D) an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification."

It is submitted that the Examiner has maintained his rejection of the claims, although he has never pointed out the specifics listed in steps A-D above: the particular

---

[5] Both cites are from Office Action of 06/06/01, lines 1-9

parts of the references relied on, the differences between the claims and the applied references, the modifications of the references necessary to arrive at the claimed subject matter, and the motivation necessary. This is despite the fact that Applicants have asked the Examiner to specifically point to portions respectively of Tognazzini, Vaghi, Beatson and Muftic on which he has relied[6]. The Examiner, in his first final office action, noted more references that allegedly show aspects of the invention, and in the second final action, he again cited a large number of references. It has never been clear whether the Examiner formally included these additional references in his rejections, but in any case he did not provide the requested clarifications for either the originally cited references or the newly mentioned ones. It is submitted that this places an undue burden on Applicants, who must, metaphorically, shoot arrows into a fog to defend the claims.

Claim Limitations not Met

In the rejections and Official Notice, the Examiner has cited four references: Tognazzini, Beatson *et al.*, Vaghi, and Muftic.

Tognazzini, the main reference, discloses a digital receipt that is generated in response to a purchase. Tognazzini appears to be mainly directed to providing this digital receipt via email to the consumer, and optionally to other interested parties for accounting purposes, but the patent does mention the situation in which

> "*A customer (e.g., traveler) gives the cashier a smart card (700) upon which a receipt is to be recorded. The cashier inserts the smart card into the card reader/writer (710) and when payment is made (720), the receipt is written into smart card memory (730). ... At a convenient time, ... receipts are extracted from smart card memory and utilized to formulate an expense report and to update accounting records.*" - (column 6, lines 55-67)

Tognazzini thus contemplates using this stored information to accomplish only one objective – reporting expenses or otherwise tracking them.

Of the other references, Beatson et al. is directed to capturing and verifying a signature and saving a copy of the signature electronically.[7] Beatson does use a smart card to provide a verified signature for the user, but a paper receipt is envisioned for the

---

[6] Response, mailed 9/14/01, to Office Action of 6/06/01
[7] Beatson, col.1,l.5-11

user, while a copy of the transaction and captured signature is kept on file by the vender.[8]

Vaghi is directed to remotely providing mailing/shipping services to customers.[9] Vaghi

uses digitally signed receipts, which can be sent and checked over the internet[10], but

Vaghi does not save these receipts to a smart card for the customer's use. Muftic is

mainly directed to providing electronic commerce over the Internet[11], although, like

Tognazzini, it does mention storing a receipt on a smart card[12]. However, Muftic does not

appreciate many of the ways in which such a receipt can be used.

It is submitted that while together these four references show that individual steps

of the inventive method were known, the instant application is not claiming these steps in

isolation. Rather, it is claiming a specific arrangement of these steps that provide

advantages that were not previously available.

> *"3.   A method for processing an electronic receipt, the method comprising the computer-implemented steps of:*
> *processing a purchase transaction;*
> *generating an electronic receipt comprising data concerning the purchase transaction;*
> *storing the electronic receipt on a removable storage medium;*
> *reading the electronic receipt on the removable storage medium;*
> *validating the electronic receipt; and*
> *in response to validating the electronic receipt, providing an indication to proceed with a delivery of goods or services related to the purchase transaction and updating an inventory affected by said delivery of goods or services."*

Independent Claim 27 recites:

> *"27.   A computer program product in a computer-readable medium for processing an electronic receipt, the computer program product comprising:*
> *first instructions for processing a purchase transaction;*
> *second instructions for generating an electronic receipt comprising data concerning the purchase transaction;*
> *third instructions for storing the electronic receipt on a removable storage medium;*

---

[8] Beatson, col.10,l.41 thru col.11,l.14
[9] Vaughi, abstract
[10] Vaughi, col.8,l.51-58
[11] Muftic, abstract
[12] Muftic, Fig.18 and col.14,l.63 thru col.15,l.17

fourth instructions for reading the electronic receipt on the removable storage medium;

fifth instructions for validating the electronic receipt; and

sixth instructions for providing an indication to proceed with a delivery of goods or services related to the purchase transaction in response to validating the electronic receipt,

seventh instructions for updating an inventory in response to validating the electronic receipt."

Like Claim 3 above, this claim utilizes the reading of a stored electronic receipt to trigger an update to the inventory. None of the references relied on discusses inventory control, and thus they do not suggest updating an inventory. Even more specifically, they do not tie updating an inventory to the validation of an electronic receipt. Therefore, this claim is allowable.

In the past, when electronic systems have been used to record two part transactions, such as the delivery of goods or services, the inventory has generally been updated when the payment is made. This is a known time when input is already being made, and with the paper receipts used in the prior art, there was simply no guarantee that the actual delivery of the merchandise would be reliably entered into the system. Electronic receipts have been coming more into use, primarily in internet commerce, but as Tognazinni has shown, they are also moving into face-to-face transactions, at least for the convenience they offer the consumer in keeping track of purchases. However, now the inventors of this application have disclosed a method of using electronic receipts stored on transportable memory, to force further input to the computer system. If a receipt is on a smart card or other electronic device, it is not readable by a human, only by a computer. Once the memory device is inserted to verify the receipt, it is a simple matter to update the inventory at delivery, which can be days later than payment. This was not possible previously. Neither Tognazinni nor the other mentioned references appear to disclose or suggest using the presentation of the removable storage medium containing the electronic receipt to trigger an update of the inventory affected. Indeed, none of these references appear to discuss inventory control, much less the use of portable storage devices to trigger the update. This claim is allowable.

Motive to Combine

Even if the Examiner had pointed out all the claimed steps in the references relied on, he has not established a motive to combine these references that would be used by one of ordinary skill in the art. Although the four references relied on are directed to utilizing computers in commerce, this is a very broad area that is in a period of explosive development. These references are directed to very different problems in that field. Tognazzini addresses the problem of a user keeping track of paper receipts for purchases, while Beatson addresses the seller's side of this problem, that of saving a record of purchases and signatures in case a charge is questioned by the consumer. Vaghi addresses the problem of providing updates for mailing services to a remote client without physically visiting the client, while Muftic addresses the problem of secure transmission of information without security breaches. One of ordinary skill in the art would not seek to solve a problem in inventory control by looking to these diverse types of references. There has been no motivation suggested that one of ordinary skill in the art would use when dealing with the problem of inventory control that the instant application solves using the claimed method.
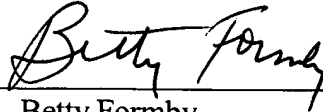
> A proper *prima facie* case of obviousness cannot be established by combining the teachings of the prior art absent some teaching, incentive, or suggestion supporting the combination. *In re Napier*, 55 F.3d 610, 613, 34 U.S.P.Q.2d 1782, 1784 (Fed. Cir. 1995); *In re Bond*, 910 F.2d 831, 834, 15 U.S.P.Q.2d 1566, 1568 (Fed. Cir. 1990).

None of these references begin to suggest the new method of using an electronic receipt that has been disclosed and claimed, nor do they suggest the modifications necessary to meet the claimed limitations.

CONCLUSION

In view of the above, Appellants respectfully submit that all the extant claims: 3-4 and 27-28 are allowable over the cited prior art and that the application is in condition for allowance. Accordingly, Appellant respectfully requests the Board of Patent Appeals and Interferences to overturn the rejections set forth in the Final Office Action.

Date *12-4-02*

Betty Formby
Reg. No. 36,536
Carstens, Yee & Cahoon, LLP
PO Box 802334
Dallas, TX 75380
(972) 367-2001

APPENDIX OF CLAIMS

3. (Amended) A method for processing an electronic receipt, the method comprising the computer-implemented steps of:

   processing a purchase transaction;

   generating an electronic receipt comprising data concerning the purchase transaction;

   storing the electronic receipt on a removable storage medium;

   reading the electronic receipt on the removable storage medium;

   validating the electronic receipt; and

   in response to validating the electronic receipt,

      providing an indication to proceed with a delivery of goods or services related to the purchase transaction and

      updating an inventory affected by said delivery of goods or services.

4. The method of claim 3 wherein the step of validating the electronic receipt further comprises inspecting a digital signature to verify the integrity of the electronic receipt.

27.   (Amended) A computer program product in a computer-readable medium for processing an electronic receipt, the computer program product comprising:

first instructions for processing a purchase transaction;

second instructions for generating an electronic receipt comprising data concerning the purchase transaction;

third instructions for storing the electronic receipt on a removable storage medium;

fourth instructions for reading the electronic receipt on the removable storage medium;

fifth instructions for validating the electronic receipt; and

sixth instructions for providing an indication to proceed with a delivery of goods or services related to the purchase transaction in response to validating the electronic receipt,

seventh instructions for updating an inventory in response to validating the electronic receipt.

28.   The computer program product of claim 27 wherein the instructions for validating the electronic receipt further comprise instructions for inspecting a digital signature to verify the integrity of the electronic receipt.